UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,323	07/07/2003	Michael Dieter Kollmann	CA920030064US1	9355

28342 7590 04/10/2007 SAMUEL A. KASSATLY LAW OFFICE 20690 VIEW OAKS WAY SAN JOSE, CA 95120	**EXAMINER** ROMANO, JOHN J

ART UNIT	PAPER NUMBER
2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/615,323	KOLLMANN ET AL.
	Examiner	Art Unit	
	John J. Romano	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *January 15th, 2007*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,3,4,7-9,11-13,16-18,20,21,24 and 25* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1,3,4,7-9,11-13,16-18,20,21,24 and 25* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All   b) ☐ Some * c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   Applicant's amendment and response received January 15th, 2007, responding to the October 6th, 2006, Office action provided in the rejections of claims 1-25, wherein claims 1, 3, 4, 7-9, 11-13, 16-18, 20, 21, 24 and 25 are pending in the application and which have been fully considered by the examiner.

Applicant's arguments and amendments with respect to claims 1, 3, 4, 7-9, 11-13, 16-18, 20, 21, 24 and 25 rejected under 35 U.S.C. 112, second paragraph, are not persuasive as addressed below in the 112 rejections.

Applicant arguing for the claims being patentable over *the prior art* (see pages 8-14 of the amendment and response) are not persuasive, as will be addressed under Prior Art's Arguments – Rejections section at item 2 and the claim rejections below. Accordingly, Applicants' arguments necessitated additional clarifications. Thus, the rejection of the claims over prior art in the previous Office action is maintained in light of additional new grounds of rejection as necessitated by amendment and **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Prior Art's Arguments – Rejections

2.   Applicant's arguments filed January 15th, 2007, in particular on pages 17-24, have been

fully considered but they are not persuasive. For example,

(A) In regard to the argument that *Ullmann* does not provide any reasonable teaching or

suggestion to support modifying its teaching in order to log the "history trace level" in the event

of an error (See response, page 18, 1st paragraph), the Examiner respectfully disagrees. *Ullmann*

discloses a filter that determines which type of messages initiates logging (E.g., see Figure 3 &

page 2, paragraph [0022] + [0023]), wherein the message types can be instructional, warning and

error messages (levels of severity). *Ullmann* also expressly discloses that clearly the system can

be adapted to generate a response to other messages particularly to warning messages which may

signal an imminent error (paragraph [0023]), wherein the plurality of filters determine the log

record type. *Wygodny's* discloses "history data" being logged (history data, e.g., See Column 34,

lines 16-63). Accordingly, one of ordinary skill in the art, would have been motivated to

combine logging history data with *Ullmann's* disclosure of logging data based on the severity of

the message type so the developer can step backward in the trace and analyze the file to see

preceding information (See *Wygodny* column 4, lines 12-16).

(B) Applicant's remaining arguments have been considered but are moot in view of the

new ground(s) of rejection necessitated by amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claims **1, 3, 4, 7-9, 11-13, 16-18, 20, 21, 24** and **25** are rejected under 35 U.S.C. 112,

second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

It is unclear what the limitation "first <u>trace</u> level" is meant to mean (relative to what

level). The term "first <u>trace</u> level" is not defined by the claim, the specification does not provide

a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be

reasonably apprised of the scope of the invention. For example, the "first <u>trace</u> level" seems to

mean at a "trace level" or state, relating to the rate of data collection (E.g. *See* Application,

Figure 2, step 220 + 230, wherein the trace detail data is produced *"at a first trace level"*), in the

first instance (Claim 1, line 3); however, then it appears to mean the level of the content of the

"trace detail data" written in step 220 to the history buffer to produce *"detail data"* in step 230,

compared to *predetermined values* as disclosed in Figure 2, steps 240 ("record level") in the

second instance (line 6), third instance (line 8) and fourth instance (line 10). For the sake of

compact prosecution the Examiner is interpreting "first level" on line 3, to mean a starting rate

for tracing. The subsequent instances are interpreted to mean the trace level of the data (content)

written by the trace. Appropriate correction is required.

Accordingly, dependent claims **3, 4, 7, 8, 11-13, 16, 17, 20, 21, 24** and **25** are rejected for

depending on a rejected base claim.

4.   Claims 1, 3, 4, 7-9, 11-13, 16-18, 20, 21, 24 and 25 rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention. For example, claim 1, recites "if the first trace

level exceeds a first predetermined value continuing to trace the program activity at the first trace

level, otherwise writing the trace buffer to a log". However, Figure 2, step 240, seemingly

compares the trace level to the first predetermined value (logging level) and if greater (*exceeds*)

than writing the trace to the log file. This seems to be contrary to the claim, which writes the

trace to a log if the value does *not exceed* the first predetermined value (logging level).

Interpreting the claim as such may result in enablement issues as well. Accordingly, the

examiner is interpreting the claim to mean *"does not exceed"* inline with step 240. Please advise

and/or appropriately correct if required.

        Accordingly, dependent claims 3, 4, 7, 8, 11-13, 16, 17, 20, 21, 24 and 25 are rejected for

depending on a rejected base claim.

5.   Claims 1, 3, 4, 7-9, 11-13, 16-18, 20, 21, 24 and 25 rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention. For example, claim 1, recites "upon writing the

content of the trace buffer to the log, determining whether the trace buffer is in need of resizing".

Looking at figure 2, this step is disclosed in step 270. However, the trace buffer is written to the

log if the first trace level exceeds a first predetermined value as claimed (step 240). It is unclear

to the examiner, if Applicant meant the trace history buffer of step 265 or step 240. The

interpretation of the first predetermined value of step 240 may introduce enablement issues as

well. Accordingly, the examiner is interpreting the claim to mean *"trace history buffer"* inline

with step 265. Please advise and/or appropriately correct if required.

Accordingly, dependent claims **3, 4, 7, 8, 11-13, 16, 17, 20, 21, 24** and **25** are rejected for

depending on a rejected base claim.

6.   Claims **1, 9** and **18** recite the limitation "the content" (E.g., *See* Claim 1, line 20). There

is insufficient antecedent basis for this limitation in the claim.

Accordingly, dependent claims **3, 4, 7, 8, 11-13, 16, 17, 20, 21, 24** and **25** are rejected for

depending on a rejected base claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   Claims **1, 3, 4, 7-9, 11-13, 16-18, 20, 21, 24** and **25** are rejected under 35 U.S.C. 103(a)

as being unpatentable over Ullmann et al., US 2002/0198983 (hereinafter **Ullmann**) in view of

Wygodny et al., US 7,058,928 (hereinafter **Wygodny**) and further in view of Chen et al., US

5,642,478 (hereinafter **Chen**).

In regard to claim **1**, **Ullmann** discloses:

- "*A method for automatically collecting trace detail data of a program activity*

  in a computer system, comprising: tracing the program activity at a first level

  to produce the trace detail data..." (E.g., see Figure 2 & page 2, paragraph

  [0021]), wherein the log manager 220 is adopted to provide multiple levels of

  logging.

- "*...writing the trace detail data to a trace buffer ...*" (E.g., see Figure 2 &

  page 2, paragraph [0021]), wherein the trace records are recorded to a

  configured destination which must inherently be a segment of memory in

  order to be effective.

- "*...if the first trace level exceeds a first predetermined value continuing to*

  trace the program activity at the first trace level, otherwise writing the trace

  buffer to a log..." (E.g., see Figure 3 & page 2, paragraph [0023]), wherein

  logging of trace data in response to an error (first predetermined value) is

  disclosed.

- "*...if the first trace level is equal to a second predetermined value, writing the*

  trace buffer to a log..." (E.g., see Figure 7 & page 4, paragraph [0035]),

  wherein logging is initiated based on an exception (trigger or trap).

- "*...if the first trace level does not exceed a third predetermined value,*

  continue to trace at the first trace level, otherwise writing the trace buffer to a

log." (E.g., see Figure 7 & page 4, paragraph [0035]), wherein the trace

history or dump stack is logged.

- "...*wherein the ... predetermined value is a ... trace level that is used to*

  determine at what level of severity the ... data of the trace buffer is caused to

  be written to a log file..." (E.g., see Figure 3 & page 2, paragraph [0022] +

  [0023]), wherein a filter determines which type of messages initiates logging,

  wherein the message types can be instructional, warning and error messages

  (levels of severity) and clearly the system can be adapted to generate a

  response to other messages particularly to warning messages which may

  signal an imminent error (paragraph [0023]), wherein the plurality of filters

  determine the log record type.

But **Ullmann** does not expressly disclose "...*wherein the second predetermined value is*

a trap value that is used as a trigger to initiate logging of history data for a specific program

activity...", "history data" or "third predetermined". However, **Wygodny** discloses:

- "...*wherein the second predetermined value is a trap value that is used as a*

  trigger to initiate logging of history data for a specific program activity..."

  (E.g., see Column 4, lines 21-27), wherein tracing is started after assignment

  of a specific value to a certain variable (specific program activity), wherein

  the tracing buffer may optionally be saved to a trace log file for later use

  (Column 3, lines 20-25). Furthermore, it is disclosed that the conditional data

  may comprise dumping the stack (history data, e.g., See Column 34, lines 16-

  63) upon the specific value.

Ullmann and **Wygodny** are analogous art because they are both concerned with the same field of endeavor, namely, logging trace data. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine **Wygodny's** trigger invoking history data to be logged from a trace buffer with **Ullmann'** tracing method. The suggestion to combine was disclosed by **Ullmann's** disclosure (E.g., see Figure 3 & page 2, paragraph [0021], [0022] + [0023]), wherein a filter determines which type of messages (which may be a THFL exception event generating a message based on a specific program triggering activity) initiates logging. Paragraph [0035] discloses advantages of tracing via specifically the "dump stack" (history data) with an exception (trigger/specific program activity).

Similarly, in light of **Wygodny's** disclosure of "history data" being logged one of ordinary skill in the art, would have been motivated to combine being history data with **Ullmann's** disclosure of logging data based on the severity of the message type so the developer can step backward in the trace and analyze the file to see preceding information (See **Wygodny** column 4, lines 12-16). But **Ullmann** and **Wygodny** do not expressly disclose

- "...*upon writing the content of the trace buffer to the log determining whether the trace buffer is in need of resizing; upon identifying the need for resizing, resizing the trace buffer; and upon identifying a lack of need for resizing, resetting the trace buffer.*" (E.g., see Column 4, lines 1-16), wherein a variable length circular buffer containing trace detail is disclosed.

Ullmann, Wygodny and **Chen**, are analogous art because they are both concerned with the same field of endeavor, namely, logging trace data. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine **Chen's**

circular buffer with **Ullmann'** tracing method. The suggestion to combine was disclosed by

Chen's disclosure of ensuring storage of particular data (E.g., see Column 4, lines 8-16).

In regard to claim **3**, the rejections of base claim **1** are incorporated. Furthermore,

Ullmann discloses:

- "...*the trace buffer is a circular buffer that coprises a configurable number of*

  trace records containing trace detail data." (E.g., see Column 4, lines 1-16),

  wherein a variable length circular buffer containing trace detail is disclosed.

In regard to claim **4**, the rejections of base claim **3** are incorporated. Furthermore,

Ullmann discloses:

- "...*the first predetermined value is a log level value."* (E.g., see Figure 3 &

  page 2, paragraph [0023]), wherein logging of trace data in response to an

  error (level) is disclosed.

In regard to claim **7**, the rejections of base claim **1** are incorporated. But, **Ullmann** does

not expressly disclose "...*the first value, the second value, and the third value are selectable."*

However, it would have been obvious to one of ordinary skill in the art, at the time the invention

was made, to make predetermined values selectable. The motivation to do so was provided by

Ullmann (Figure 2 & page 2, paragraph [0023]), where the system can be adapted to respond to

different levels. Therefore, it would have been obvious to one of ordinary skill in the art to

configure the levels to direct the logging as disclosed by **Ullmann**.

In regard to claim **8**, the rejections of base claim **7** are incorporated. But, **Ullmann** does

not expressly disclose "...*the log and the trace buffer reside on different computer systems that*

communicate over a network." However, it would have been obvious to one of ordinary skill in

the art, at the time the invention was made, to implement the separate components on separate or

remote machines. The motivation to do so was provided by **Ullmann** (Figure 2 & page 2,

paragraph [0021]), where the remote subsystems are disclosed. Therefore, it would have been

obvious to one of ordinary skill in the art to implement different components remotely over a

network.

In regard to claims **16-17**, this is a system version of the claimed method discussed

above, in claims **7-8**, wherein all claimed limitations have also been addressed and/or cited as set

forth above. For example, see **Ullmann**, (E.g., see Figure 1 & related text), wherein a computer

system is disclosed.

In regard to claim **11**, see claim **3**.

In regard to claim **12**, this is a system version of the claimed method discussed above, in

claim **3**, wherein all claimed limitations have also been addressed and/or cited as set forth above.

For example, see **Ullmann**, (E.g., see Figure 1 & related text), wherein a computer system is

disclosed.

In regard to claims **24-25**, this is a computer readable medium version of the claimed

method discussed above, in claims **7-8**, wherein all claimed limitations have also been addressed

and/or cited as set forth above. For example, see **Ullmann**, storage device (Figure 2).

In regard to claim **20**, this is a computer readable medium version of the claimed method

discussed above, in claim **3**, wherein all claimed limitations have also been addressed and/or

cited as set forth above. For example, see **Ullmann**, storage device (Figure 2).

In regard to claims **9** and **13**, this is a system version of the claimed method discussed

above, in claims **1** and **4**, wherein all claimed limitations have also been addressed and/or cited

as set forth above. For example, see **Ullmann**, (E.g., see Figure 1 & related text), wherein a computer system is disclosed.

In regard to claims **18** and **21**, this is a computer readable medium version of the claimed method discussed above, in claims **1** and **4**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Ullmann**, storage device (Figure 2, element 238).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Romano whose telephone number is (571) 272-3872. The examiner can normally be reached on 8-5:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.
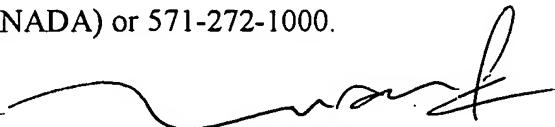
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